From: Semerad, Jim L.

To: jacki

Cc: Alexis North; Cindy Beeler; Tricia Pfeiffer; Kyle Olson; Dihle, Mark A.; Peterson, Todd F.; Jahraus, Tim M.;

Kristen Keteles

Subject: RF: air?

08/08/2012 07:21 AM Date:

Jacki:

In response to your email, we have checked with the local oil companies and have found that there is no monthly maintenance operation that would match up with your symptoms (see yellow highlight below).

Although your observations didn't result in an answer, it is the kind of brainstorming that may ultimately find the answer you are looking for. Since you see a pattern, I recommend that you further explore causes that could match up with the timing of your symptoms - do you frequent a certain area of your farm each month, do you come into contact with certain cattle feeds or chemicals, do you eat certain foods, etc. I know that you have probably already considered these types of possibilities but it may be something very simple yet very elusive.

Jim Semerad

Division of Air Quality Manager, Permitting and Compliance State Dept. of Health

918 E. Divide Ave. 2nd Floor Bismarck ND 58501-1947

(701) 328-5188 isemerad@nd.gov Division Website:

http://www.health.state.nd.us/AQ/Airhomepage.htm

From: jacki [mailto:jboid@dia.net]

Sent: Thursday, August 02, 2012 7:51 AM

To: Semerad, Jim L.

Cc: Alexis North; Cindy Beeler; pfeiffer.Tricia@epamail.epa.gov; Kyle Olson; Dihle, Mark A.; Peterson,

Todd F.; Jahraus, Tim M.; keteles.Kristen@epamail.epa.gov

Subject: Re: air?

I happened to notice last night on my antibotic perscription that I seem to have to get this refilled every month around the same time. I checked back on my daily notes and found that on or near the 30th of the past months I have noticed the strong sewer smell in the air, followed by various health problems sinus infection, sore throat, ear infection, headache, breathing problems, burning eyes, bad leg cramps, dental problems (filings, crowns have fallen out of both our teeth, broken teeth), and sick animals. This is a constant endless circle with antibotic treatment and on some months prednisone is necessary for both myself and Steve. I do not think this is a freak act of nature or coincidence, is there possibly a reason for a release due to maintence or storage tank levels at certain times of the month?

---- Original Message -----

From: Semerad, Jim L.

To: jacki

Cc: Alexis North; Cindy Beeler; pfeiffer.Tricia@epamail.epa.gov; Kyle Olson; Dihle, Mark A.;

Peterson, Todd F.; Jahraus, Tim M. Sent: Tuesday, July 31, 2012 11:41 AM

Subject: RE: air?

Jacki:

My response/comments are below in red text – I hope you find the insight helpful.

Jim Semerad

Division of Air Quality

Manager, Permitting and Compliance State Dept. of Health 918 E. Divide Ave. 2nd Floor Bismarck ND 58501-1947

(701) 328-5188 jsemerad@nd.gov

Division Website: http://www.health.state.nd.us/AQ/Airhomepage.htm

From: jacki [mailto:jboid@dia.net]
Sent: Sunday, July 29, 2012 3:21 PM

To: Semerad, Jim L.; pfeiffer.Tricia@epamail.epa.gov; Kyle Olson

Cc: Alexis North; Cindy Beeler

Subject: air?

I am not sure what the change was in the area on Firday & Saturday but the air quality actually seemed better, I was starting to smell things again, like grass and hay while working in the yard. Steve and I both felt a bit better, not so tired. I noticed the cats were breathing better and their eyes were not all matted up. Now something has happened again this afternoon, I have a very sore throat and congested - I have been outside working, the cats are all coughing and noses and eyes are all matted up. We do have a north-north west wind, and there is a drilling rig to the north I can see but it is several miles away. We checked air quality downwind of the rig last week and found no apparent problems, and you are correct, the distance is pretty substantial. I have noticed that the new Statoil well to the west has been blowing black smoke for the past 2 days, I stopped and talked to the relief pumper on Friday morning and asked him about this - he did not know why, said there may be oil spilling into the flare. If this has continued, we will contact them - let me know. At times intermittent smoke may come from a well; however, if a well has heavy smoke blowing for a continuous period as you describe, you can contact NDIC and the Department with specific well names and numbers for us to investigate. Also noticed yesterday that the flare to the east on the Oasis well is burning, the flare to the west right behind us was not but the flares farther west on Oasis sites were - a lot of black smoke coming from one of them. Again, flaring can generate a small wisp of smoke as part of normal operation but significant smoke indicates that there may be operational problems - let us know if this is the case. There is a frack job to the south but that is at least 4 miles and the wind is not coming from that direction.

Is this H2S coming from somewhere, maybe right here on our property? ND has a stringent H2S limit of only 50 parts per billion (ppb). Personal monitors usually alarm at 10 parts per million (which equals 10,000 ppb) to protect health. The reason ND's limit is so much more stringent is that H2S is

very pungent and creates a nuisance at far lower levels. In general, odors are noticeable around 5-15 ppb for most people. Our instrument measures below these levels. The distinctive odor of H2S makes it easily identifiable, but we have not measured or smelled it in your area.